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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/660,776

09/12/2003

Ji Heon Pyeong

IK-0028A

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EXAMINER

SNIDER, THERESA T

ART UNIT

PAPER NUMBER

1744

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

02/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/660,776

Applicant(s)

HEON PYEONG, JI

Examiner

Theresa T. Snider

Art Unit

1744

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 14-27,36,37 and 40-51 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 14-27,36,37 and 40-51 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 23, 25-27, 45, 47 and 51 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Dyson.

Dyson discloses a lower casing (fig. 1, #14).

Dyson discloses an upper casing (fig. 1, #16).

Dyson discloses a motor housing in the lower casing (fig. 1, #24).

Dyson discloses an inlet (fig. 1, #20).

Dyson discloses a filtering device (fig. 1, #22).

Dyson discloses a discharge outlet (col. 2, lines 17-18).

With respect to claim 25, Dyson discloses an outlet in an upper portion of the filtering device (fig. 1, unnumbered tube/opening above the number 22).

With respect to claims 26 and 45, Dyson discloses the motor housing provided in one portion and the filtering device in an opposing portion (fig. 1, #22,24).

With respect to claims 27 and 51, Dyson discloses a vacuum cleaner (title).

With respect to claim 47, Dyson discloses a cover positioned intermediate the upper casing and the motor housing (fig. 1, unnumbered element on top of large circle at #24).

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3. Claims 36, 40-41, 44-48 and 51 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Andersson-Sason.

Andersson-Sason discloses a canister formed by a lower casing and an upper casing to form a chamber with a first portion serving as a collection chamber and a second portion serving as a motor housing (fig. 4, #12,13,15,25).

Andersson-Sason discloses a central longitudinal axis of motor located within the motor housing and oriented substantially vertically (fig. 4, #21).

With respect to claims 36 and 46, Andersson-Sason discloses an inlet formed in the same portion as the motor (fig. 4, #29, col. 3, lines 21-22).

With respect to claims 36 and 45, Andersson-Sason discloses the first portion provided in one portion and the second portion in an opposing portion (fig. 4, #15,25).

With respect to claims 40 and 47, Andersson-Sason discloses a cover positioned intermediate the upper casing and the motor housing and filtering chamber (fig. 4, #12,14,15,24,25).

With respect to claims 41 and 48, Andersson-Sason discloses the cover covers both the motor housing and the filtering chamber (fig. 4, #14).

With respect to claims 44 and 51, Andersson-Sason discloses a vacuum cleaner (title).

***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

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5. Claims 14-20, 22, 42, 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason in view of The Admitted State of the Prior Art as shown in figure 2(hereafter ASPA).

Andersson-Sason discloses a similar device however fails to disclose a damper.

Andersson-Sason discloses a lower casing (fig. 4, #13).

Andersson-Sason discloses a motor housing installed in the lower casing (fig. 4, #21).

Andersson-Sason discloses a cover configured to directly cover the motor housing (fig. 4, #14(housing being defined by the wall #17, the unnumbered wall having #22 and the unnumbered wall near number #16,24,25,21) OR 24).

With respect to claims 14, 42 and 49, Andersson-Sason discloses an outlet in the cover however fails to disclose a damper (fig. 4, #26). ASPA discloses the placement of a damper in the cover of a housing (fig. 2, #28a). It would have been obvious to one of ordinary skill in the art to provide the damper of ASPA in Andersson-Sason to allow for regulation of the flow of air out of the chamber to prevent overheating.

With respect to claim 15, Andersson-Sason discloses an upper casing (fig. 4, #12).

With respect to claim 16, Andersson-Sason discloses a filtering chamber in the lower casing (fig. 4, #15).

With respect to claim 17, Andersson-Sason discloses a filtering device in the filtering chamber (fig. 4, #20).

With respect to claims 18, Andersson-Sason discloses the cover covers both the motor housing and the filtering chamber (fig. 4, #14).

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With respect to claim 19, Andersson-Sason discloses the cover is positioned intermediate the upper casing and the motor housing and filtering chamber (fig. 4, #12,14,15,25).

With respect to claim 20, Andersson-Sason discloses the motor housing provided in one portion and the filtering device in an opposing portion (fig. 4, #15,25).

With respect to claim 22, Andersson-Sason discloses a vacuum cleaner (title).

6. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason in view of ASPA as applied to claim 14 above, and further in view of EP0344136.

Andersson-Sason in view of ASPA discloses a similar device however fails to disclose a pressure sensor on the cover.

EP0344136 discloses a pressure sensor in an upper wall of the motor housing (fig. #22,15). It would have been obvious to one of ordinary skill in the art to provide the pressure sensor of EP0344136 in the motor housing of Andersson-Sason in view of ASPA to allow for control of the motor when the pressure therein exceeds a predetermined level.

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dyson as applied to claim 23 above, and further in view of Yung.

Dyson discloses a similar device however fails to disclose a filter.

Yung discloses a filtering device that separates air due to gravity having a filter (fig. 6, #68). It would have been obvious to one of ordinary skill in the art to provide the filter of Yung in Dyson to ensure for the most effective separation of dirt from the air.

8. Claims 43 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andersson-Sason as applied to claim 38 above, and further in view of EP0344136.

Andersson-Sason discloses a similar device however fails to disclose a pressure sensor on the cover.

EP0344136 discloses a pressure sensor in an upper wall of the motor housing (fig. #22,15). It would have been obvious to one of ordinary skill in the art to provide the pressure sensor of EP0344136 in the motor housing of Andersson-Sason to allow for control of the motor when the pressure therein exceeds a predetermined level.

#### ***Response to Arguments***

9. Applicant's arguments filed 12/6/2006 have been fully considered but they are not persuasive. Applicant argues Dyson fails to include a filtering device configured to create a downwardly swirling flow of suction air, wherein the air is received into an upper portion of the filtering device and flows downward, the suctioned air being discharged out through an outlet. Applicant is believed to be in error with this argument because Dyson discloses the filtering device being a cyclonic means (col. 3, lines 12-14, claim 4). One of ordinary skill in the art knows that a cyclonic means 'swirls' the air downwardly to provide for separation. Dyson discloses air received into an upper portion and discharged out through an outlet (fig. 1, #20, col. 2, lines 17-18).

Applicant argues Dyson fails to disclose a collection chamber located in the rear portion

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and a motor located in the front portion of a canister. With respect to claim 36, this argument IS persuasive because the claim further requires an inlet formed in the front portion. While Dyson discloses the collection chamber in one portion and the motor in another portion, the inlet is disclosed in the same portion as the collection chamber, as opposed to inlet needing to be in the same portion as the motor. With respect to claim 45, the claim fails to recite any elements other than the collection chamber and the motor to front and rear portions. Therefore, as long as the collection chamber and the motor are in different portions in Dyson, the portion containing the motor can be considered the front portion and the portion containing the collection chamber can be considered the rear portion.

Applicant argues Andersson-Sason fails to disclose a collection chamber located in the rear portion and a motor located in the front portion of a canister. This argument is not found persuasive because Andersson-Sason the collection chamber and the motor in different portions in Dyson, the portion containing the motor can be considered the front portion and the portion containing the collection chamber can be considered the rear portion. Andersson-Sason further discloses an inlet in the same portion as the motor (fig. 4, #29, col. 3, lines 21-22). It is noted that the claim fails to define the 'inlet' therefore the opening of Andersson-Sason is believed to meet the limitation.

Applicant argues Andersson-Sason fails to disclose a cover that directly covers and protects the motor housing. This argument is not found persuasive because Andersson-Sason discloses a motor housing defined by the wall #17, the unnumbered wall having #22 and the unnumbered wall near number #16,24,25,21. A cover is directly over the motor housing (fig. 4,



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#14). Further, if the motor housing was to be further defined to only house a motor, #24 is a cover that is directly over the motor.

***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

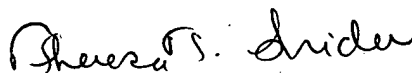
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Snider whose telephone number is (571) 272-1277. The examiner can normally be reached on Monday-Friday (5:30am-2:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gladys Corcoran can be reached on (571) 272-1214. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Theresa T. Snider  
Primary Examiner  
Art Unit 1744

2/21/07